

**ABSTRACT**

Process for the production of synthesis gas by catalytic steam reforming of a hydrocarbon containing feedstock in parallel in an autothermal steam reformer and in one or more steam reformers in series, the heat for the steam reforming reactions in the one or more steam reformers being provided by indirect heat exchange with the combined effluents from the one or more steam reformers with the autothermal steam reformer, and wherein carbon monoxide containing gas is added to the feedstock prior to the steam reforming in the autothermal steam reformer and/or prior to the steam reforming in the one or more steam reformers, the carbon monoxide containing gas having a molar ratio of hydrogen to carbon of less than 4.5 and being added in an amount resulting in a product stream having a molar ratio of hydrogen to carbon monoxide of between about 1.8 and 2.3.